

Chapter 9th, treats of the cases and results obtained by the use of Dr. Chase's truss, and from the experience there exhibited, holds out a strong ground of hope that the profession is now furnished with an instrument of very decided and, at least, extensive utility.

W. E. H.

ART. XVIII. *Medicina Externa Morborum Internorum, sive Methodi Iatralipticae et Endermatice Expositio Historica, Physiologica et Therapeutica, nec non utriusque Comparatio.* Auctore CAROLO JOSEPHO VAN COOTH, Med. Stud. Trajecti ad Rhenum, 1834. 8vo. pp. 317.

External remedies in Internal Diseases; or a Historical, Physiological, and Therapeutical Exposition of the Iatralptic and Endermic Methods of Treatment, with a comparison between them. By C. J. VAN COOTH. Utrecht, 1834.

In 1831, the Medical Faculty of the University of Utrecht offered a premium for the best exposition, founded upon anatomico-physiological principles and well established facts, of the actual value of external medication in the treatment of internal diseases; which premium was awarded on the 26th of March, 1832, to the essay before us.

Although the production of a student of medicine, and exclusively compiled from the writings of others, it nevertheless presents much higher claims to our notice than the ordinary class of prize essays—comprising a valuable collection of facts, methodically arranged, in relation to a subject which has elicited too little attention from the profession in this country.

The work is divided into five chapters.

The first contains a historical account of the employment of external remedies.

The second embraces an investigation into the anatomico-physiological principles upon which the employment of external remedies is based, and their effects upon the internal organs are explained.

The third treats of the Iatralptic method, or the application of remedial agents to different parts of the surface of the body, the cuticle remaining entire.

The fourth contains an exposition of the endermic method, or the application of medicines to portions of the surface denuded of the cuticle.

The fifth presents a comparison between these two methods. The whole being followed by sixteen corollaries which the author conceives are legitimately deducible from the facts set forth in the essay.

M. Van Cooth is a very decided advocate for external medication, under particular circumstances of disease, either as a substitute for, or as an auxiliary to the ordinary treatment by internal remedies. His view of the subject is, upon the whole, however, extremely judicious and fully sustained by the facts which he has adduced. With him we fully concur in opinion, that, by the judicious physician, the application of remedial agents to the surface of the body may often be resorted to with advantage as a means of fulfilling important indications, whenever, as is frequently the case, he is precluded from administering the appropriate remedies by the mouth.

In a general consideration of external remedies for the cure of internal maladies would be necessarily included, not only such as produce, when applied to the surface, effects similar to those which result from the same articles, when introduced into the stomach, but, also, such as produce simply a stimulant or sedative impression upon the exterior of the body, and in this manner indirectly concur in relieving the internal organs and tissues from disease, as for instance friction, bathing, rubefacients, blisters, setons, issues, moxas, &c. It is only the former class, however, which constitute the subject of the present essay.

The fact that certain articles of the *materia medica*, when applied, under particular circumstances, to the sound skin, are more or less readily absorbed and carried into the circulation, so as to produce upon the several tissues and organs precisely the same remedial effects as result from their administration in the usual manner, by the mouth, is now well established by numerous observations, of the accuracy of which we have no reason to doubt. This is amply shown in the work before us.

The number of remedies which are capable of being thus applied in the treatment of diseases, is nevertheless extremely limited—while the effects produced by even the most energetic of these are comparatively trifling, and attended always with a good deal of uncertainty. Consequently, the application of remedial agents to the sound skin is only adapted to the treatment of a few diseases of a strictly chronic character. M. Van Cooth, it is true, places upon this method a higher estimate than we conceive it merits; he admits, however, its very great inferiority to that in which the remedies are brought, by the removal of the cuticle, in immediate contact with the true skin.

When remedial agents are applied to a surface denuded of its cuticle, or endermically, as it is termed, their absorption takes place with far more promptness, than when they are applied, under any circumstances, to the sound skin. In this manner, also, a much larger number may be employed, and their desired effects are more certainly obtained. Consequently, endermic medication, as our author properly remarks, is adapted to the treatment of a more extensive class of diseases than the Iatralytic method, and capable of fulfilling more pressing and important indications. The latter can never be depended upon for the speedy removal of any urgent symptom, while the former often may with a good deal of certainty.

The following list is given by M. Van Cooth, as the remedies which when used endermically have been shown to produce the same effects precisely as when they are introduced into the stomach:—Peruvian bark and its extracts, sulphuret and muriat of quinia, assafetida, musk, opium, acetat, sulphat and muriat of morphia, strychnia, belladonna, stramonium, saffron, corrosive sublimate, calomel, Kermes mineral, emetic tartar, emetine, aloes, gamboge, rhubarb, jalap, elaterium, croton oil, squill, digitalis.

The diseases in which the endermic method of treatment has been successfully employed, are intermittent and malignant fevers, chronic bronchitis, phthisis and other affections of the chest; tetanus, neuralgia, rheumatism, gout, paralysis, paralytic aphonia, amaurosis, spasmodic dysphagia, delirium tremens, hysteria, odontalgia, vomiting, strangury, &c.

Notwithstanding the author of the present essay has been led, very naturally, to place the advantages of external medication in as favourable a point of view as possible, he is far from recommending it as a substitute for the usual plan of treating internal diseases, in any case in which the latter can with propriety be resorted to. Thus, he very properly remarks, that "in cases in which the internal exhibition of remedies is neither impeded nor counter indicated, their administration by the mouth is always to be preferred to their use externally." In a few instances, however, external medication may be employed in conjunction with the ordinary plan of treatment, as an important auxiliary.

The circumstances under which, in the opinion of M. Van Cooth, either the Iatralytic or endermic methods of treatment will be found useful, are the following:—

When we are unable to introduce our remedies into the stomach, either in consequence of a tetanic closure of the jaws, dysphagia, spasmodic constriction, or mechanical obstruction of the œsophagus; in cases of extreme prostration, or of profound stupor; during a state of fainting, delirium, convulsions, or mania, or when the stomach is labouring under great irritability,

When, from idiosyncrasy, the patient is affected in a peculiar and distressing manner by the internal exhibition of certain remedies, by their application to the surface, those effects may often be prevented, and the desired operation obtained.

Patients, occasionally, refuse to take medicines by the mouth, either from uncontrollable disgust or from prejudice—in such cases their external use may be resorted to with the happiest effects.

External medication is recommended by Hufeland and others as peculiarly applicable to the cases of infants and young children, from the extreme difficulty so generally experienced in administering remedies to such patients by the mouth, as well as from the deleterious effects these not unfrequently produce upon the delicate coats of their stomachs.

It also, occasionally, happens, from the morbid condition of the alimentary canal or other organs, that remedial agents cannot, with propriety, or without producing injurious symptoms, be administered internally, but may be safely and beneficially applied externally. Thus, it is remarked by Christien and Brera, that digitalis, when applied to the skin, acts most effectually in the removal of dropsies, and without affecting the pulse, and hence may be prescribed in this manner when it could not without danger be given by the mouth. Corrosive sublimate, likewise, in many cases cannot be introduced into the stomach even in the smallest doses, without giving rise to considerable irritation of the alimentary canal, extending thence to the lungs, while from its external use it is said that no such effects result. Squill, opium, bark, quinia, various purgatives, and other remedies may, in like manner, be employed endermically, when their internal use would be of doubtful propriety, or absolutely forbidden.

External medication may, likewise, be frequently resorted to with benefit to assist the operation of internal remedies, when the latter fail to produce the desired effects, or when it is desirable to fulfil promptly two distinct indications.

Finally, when all other modes of treatment have failed in the cure of disease, external medication has been known to succeed.

According to M. Van Cooth, external medication is contraindicated in all cases attended with an inflammatory diathesis; in all affections arising from excessive irritation and spasm of the absorbents or from irritation of the extreme vessels. In those diseases which are neither sthenic nor urgent, but in which the activity of the absorbent system and digestive canal continues; and, finally, in old persons and those of a rigid, dry, and torpid constitution, in whom there exists a torpor of the absorbent system.

The endermic method is in particular contraindicated in extremely irritable patients, who are unable to endure the pain which follows the application of remedies to the denuded skin; in acute and sthenic diseases, and in cases of excessive corpulence, pregnancy, or great general debility.

The application of medicines to the surface in the treatment of internal diseases, especially after the endermic method, is unquestionably deserving of a more extensive trial than has yet been given to it. The facts which have been already established in relation to its efficacy, under circumstances of peculiar emergency, prove it to be an important auxiliary to our ordinary plans of treatment. Many important particulars connected with it remain, however, to be still elicited by further observations.

Notwithstanding it has been shown that all remedies which have to be administered in large doses, or in which the active principles are combined with a considerable amount of inert matter, together with such as are productive of considerable irritation to the part to which they are applied are unadapted to endermic medication, yet we are still unacquainted with the entire list of remedial agents that are capable of being thus employed—as well as with the particular form

under which, when applied to the skin, their curative effects are most certainly obtained. The directions, in regard to the latter particular, presented in the work before us, are chiefly copied from the very excellent Essay on Endermic Medication, by Dr. Gerhard of this city, originally published in the North American Medical and Surgical Journal for April and July, 1830—to which essay ample credit is given by M. Van Cooth; from its pages, the fourth chapter of the work before us is, in fact, chiefly compiled.

D. F. C.

ART. XIX. A Treatise on Consumption, embracing an Inquiry into the Influence exerted upon it by Journeys, Voyages, and Changes of Climate; with Directions for the Consumptive visiting the South of Europe, and remarks upon its Climate. Adapted for General Readers. By WILLIAM SWEETSER, M. D., &c. 8vo. pp. 254. Boston, 1836.

Whatever opinion may be entertained as to the propriety of medical treatises prepared for the use of general readers, there cannot, we conceive, be any very valid objections urged against such as are intended merely to point out in a popular manner, the causes of dangerous and prevailing maladies—to disabuse the public mind of fatal errors in regard to their distinctive characters, and to indicate the means best adapted for their prevention, so far as it regards an attention to diet, regimen, and such other particulars as it is in the power of those individuals liable to, or threatened with an attack, to control.

It is true that a work, of even this character, may be productive of much more injury than good, unless it be prepared with great judgment and caution; so difficult is it to convey accurate information on subjects connected with medicine to those who are unacquainted with anatomy and physiology as well as the general principles of pathology.—By such, from even the plainest and most cautiously written treatise, extremely erroneous impressions are apt to be derived. Hence arises the objections which are urged against all works of this kind, and which have very generally deterred those from undertaking them, who are the best qualified for the task by their education, talents, and experience.

If a popular medical treatise is ever calculated to produce beneficial results, it would certainly appear to be one that shall fully instruct the public in regard to the persons who are most predisposed to attacks of pulmonary consumption; the circumstances under which it usually occurs; the history of its premonitory symptoms, and the most certain means for warding off its attacks, whether in relation to a change in the dwellings, occupations, and mode of life of the individuals, or their speedy removal to a more favourable climate.

Insidious in its commencement, while it is almost invariably and often rapidly fatal, when once the disease has been roused into action, experience nevertheless teaches us that much may be done, in the early stages of consumption, to at least preserve it in a latent state, and thus prolong the life, comfort, and usefulness of the patient. Unfortunately, this is too often prevented, in consequence of that period being allowed, through ignorance, to elapse during which alone either remedial or prophylactic treatment is of much avail. The lungs being allowed to become disorganized, death is inevitable.

It is with the view of enlightening the public in relation to this important subject, that the treatise before us is professedly written.

"The special designs of the present work," remarks the author, "are to make known the causes of, and best means of preventing the fatal malady under consideration, that those unfortunate individuals, especially, who bear in their physical organization its indications, or those who are their guardians in early life, may be apprized of their danger, and thus induced to a reasonable resort to those